

1745 - INTRODUCTION, TRANSPLANT, AUGMENTATION, AND
REESTABLISHMENT OF FISH, WILDLIFE AND PLANTS

1. Explanation of Material Transmitted: This release is a revised Bureau of Land Management (BLM) Manual Section 1745 - INTRODUCTION, TRANSPLANT, AUGMENTATION, AND REESTABLISHMENT OF FISH, WILDLIFE AND PLANTS and replaces the previous version in its entirety. It identifies key policies and guidelines for the planning, coordination, and execution of fish, wildlife and plant introductions, transplants, augmentations, and reestablishment. This manual establishes a foundation to ensure that decisions made are environmentally sound; will not adversely impact ecosystems; and, will facilitate attainment, or not impair progress toward attainment, of BLM land health goals.
2. Reports Required: None.
3. Material Superseded: The BLM Manual Section superseded by this release is listed under "REMOVE," below. No other directives are superseded.
4. Filing Instructions: File as directed below.

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Glossary of Terms

- .01 Purpose. This Manual Section establishes the Bureau of Land Management's (BLM) policy and guidance on the introduction, transplant, augmentation, and reestablishment of native and non-native fish, wildlife and plants. Specific guidance and requirements for the introduction of non-native species for use as Biological Control Agents must meet the requirements outlined in BLM Manual Section 9014 - Use Of Biological Control Agents Of Pests On Public Lands.
- .02 Objectives. The objectives are to:
- (1) ensure that management of native and non-native species enhances, restores, and does not reduce the physical, biological, and genetic diversity of natural ecosystems;
 - (2) ensure that the introduction of non-native species is environmentally and ecologically sound and will, to the greatest extent possible, not adversely impact natural ecosystems and their physical and biological diversity;
 - (3) ensure that appropriate planning, coordinating, monitoring, and evaluating for introductions, transplants, augmentations, and reestablishments are performed; and
 - (4) ensure full compliance with applicable State and Federal laws, Executive Orders, and regulations.
- .03 Authority.
- A. Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*).
 - B. Federal Land Policy and Management Act (FLPMA) of 1976, as amended (43 U.S.C. 1701 *et seq.*).
 - C. National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 *et seq.*).
 - D. Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. 4701 *et seq.*).
 - E. The Wilderness Act of 1964 (16 U.S.C. 1131-1136).
 - F. Federal Plant Pest Act (7 U.S.C. 150aa *et seq.*).
 - G. Federal Noxious Weed Act of 1974, as amended (7 U.S.C. 2801 *et seq.*).

- H. The Sikes Act of 1960, as amended, (16 U.S.C. 670a *et seq.*).
- I. Executive Order (EO) 13112 - Invasive Species Control.
- J. BLM Manual Section 6500 - Wildlife and Fisheries Management.
- K. BLM Manual Section 6521 – State Agencies.
- L. BLM Manual Section 6720 - Aquatic Resource Management.
- M. BLM Manual Section 6840 - Special Status Species Policy.

.04 Responsibility

- A. Assistant Director, Renewable Resources and Planning is responsible for the development, implementation, coordination, and integration of policies and procedures for the introduction, transplant, augmentation, and reestablishment of fish, wildlife and plants.
- B. Division Chief, Fish and Wildlife Conservation, is responsible for:
 - 1. Developing policy, procedures and technical guidance for the introduction, transplant, augmentation, and reestablishment of fish, wildlife and federally-listed plant species.
 - 2. Ensuring that wildlife and special status plant protection procedures are incorporated into all introductions, transplants, augmentations, and reestablishments of fish, wildlife and federally-listed plant species.
 - 3. Evaluating the effectiveness of all fish, wildlife and federally listed plant species introduction, transplant, augmentation and reestablishment programs.
 - 4. Developing guidance for the preparation of habitat management or other appropriate plans to facilitate the recovery of native fish, wildlife and federally-listed plants.
- C. Division Chief, Forests, Rangelands, Riparian and Native Plants, is responsible for:
 - 1. Developing policy, procedures and technical guidance for the introduction, transplant, augmentation, and reestablishment of native plants that are not classified as federally-listed plant species and non-native plant species.

2. Ensuring that rangeland ecosystem management and protection procedures are incorporated into the introduction, transplant, augmentation, and reestablishment of aforementioned plant species.
 3. Evaluating the effectiveness of introduction, transplant, augmentation, and reestablishment programs for all plants excluding federally-listed plants.
 4. Developing guidance for the development of Allotment Management Plans or other appropriate activity or action plans to facilitate the reestablishment of native plants that are not classified as federally-listed plant species and non-native plants.
- D. Director, The National Operations Center (NOC) is responsible for providing technical expertise, assistance and/or support within limits of NOC operations and responsibilities, on fish, wildlife and plant introductions, transplants, augmentations and reestablishments.
- E. State Directors are responsible for implementing systematic procedures for planning, conducting, and evaluating fish, wildlife and plant introductions, transplants, augmentations and reestablishments.
- F. District Managers are responsible for implementing systematic procedures (within limits delegated by the State Director) for planning, conducting, and evaluating wildlife and plant introductions, transplants, augmentations, and reestablishments.

.05 References.

- A. Department of the Interior (DOI) Manual Sections:
1. 135 DM 1.2, 1.3A and 1.3D (Bureau of Land Management)
 2. 135 DM 3.2C (2) (Bureau of Land Management)
 3. 135 DM 4.1A (1) and 4.1B (Bureau of Land Management)
 4. 511 DM 8.2B and 8.3 (Coordination with State & Local Governments)
 5. 516 DM (National Environmental Policy Act of 1969)
 6. 517 DM 1 (Integrated Pest Management)
- B. BLM Manual Sections:
1. 1203 – Delegation of Authority
 2. 1601 – Bureau Planning System
 3. 1737 – Riparian/Wetland Area Management
 4. 1740 – Renewable Resource Improvements and Treatments.
 5. 1790 – National Environmental Policy Act

6. 4120 – Grazing Management
7. 6500 – Wildlife and Fisheries Management
8. 6521 – State Agencies
9. 6720 – Aquatic Resource Management
10. 6780 – Habitat Management Plans
11. 6830 – Animal Damage Control
12. 6840 – Special Status Species Management
13. 9011 – Chemical Pest Control
14. 9014 – Use of Biological Control Agents of Pests on Public Lands
15. 9015 – Integrated Weed Management

C. BLM Handbook:

1. H-1601-1- Land Use Planning Handbook
2. H-1740-2- Integrated Vegetation Management Handbook
3. H-1790-1- National Environmental Policy Act Handbook

D. Code of Federal Regulations

- 43 C.F.R. Part 24 – State- Federal Relationships
43 C.F.R. Part 8560 – Management of Designated Wilderness Areas.
50 C.F.R. Part 17 – Endangered and Threatened Wildlife and Plants

.06 Policy. The policies for fish, wildlife and plant introductions, transplants, augmentations and reestablishments by BLM are:

- A. Native species shall be used, unless through the NEPA process it is determined that the following criteria are met:
- 1) suitable native species are not available;
 - 2) the natural biological diversity of the proposed management area will not be diminished;
 - 3) non-native species can be confined within the proposed management area;
 - 4) analysis of ecological site inventory information indicates that a site will not support reestablishment of plant species that historically were part of the natural environment; and,
 - 5) resource management objectives cannot be met with native species.
- B. It is the policy of the BLM to manage for biologically diverse, resilient and productive native plant communities to sustain the health and productivity of the public lands. All non-native vegetation used should be non-invasive, short-lived, have low reproductive capabilities, or be self-pollinating to prevent gene flow into

the native community.

- C. The restoration and maintenance of native and non-native species, and their habitats, shall be conducted in accordance with approved land use plans. All BLM proposed introductions, transplants, reestablishments, or augmentations should be addressed in Resource Management Plans (RMP). Such introductions, transplants, reestablishments, and augmentations shall conform with management direction and decisions in these plans.
- D. The BLM shall coordinate with the appropriate State and/or Federal agency(ies) for any introductions, transplants, augmentation or reestablishments of any species on BLM land. State level Memorandums of Understanding (MOU) or Assistance Agreements, including Cooperative Agreements, with cooperating agencies shall provide the basis for identifying roles and responsibilities for releases. Field-level agreements or operational plans outline the specifics for each release effort.
- E. Quarantine and other animal and plant health procedures must comply with all Federal and State regulations, restrictions and requirements governing the release of disease-free organisms and the importation of non-native plants and animals into the United States.
- F. Exotic or domesticated species that have reverted to a feral state (“feral species”) and that are adversely impacting native species and/or habitats should be controlled and/or removed, unless either their presence is authorized by State or Federal law, or their removal is prohibited by State or Federal law, in a manner consistent with State and Federal policies, procedures and regulations.
- G. Feral cat colony management programs known by the acronym TTVNR (Trapped, Tested, Vaccinated, Neutered, Released) shall not be established or maintained on any BLM-administered lands.
- H. In designated wilderness areas, native and naturalized species may be augmented or reestablished to: 1) perpetuate and enhance recovery of a listed Threatened or Endangered species, and thus prevent extinction; or, 2) restore a population of indigenous species reduced or eliminated by human influence.
- I. Exceptions to, and modifications of, existing policies for a specific wilderness area may be provided in the legislation designating the area as wilderness, and must be accommodated as Statements of Congressional policy and objectives. In addition, designation legislation may provide for adoption of specific fish and wildlife guidelines and must be reviewed carefully to determine policy

requirements for the specific wilderness areas involved.

- J. On lands under wilderness review, introductions, transplants, reestablishments, and augmentations may be conducted for the purposes as described under paragraph H. Non-native species shall not be introduced, except as biological control agents. Where non-natives were introduced before October 21, 1976, augmentation may continue.
- K. The BLM will cooperate with the National Marine Fisheries Service (NMFS), U. S. Fish and Wildlife Service (FWS), and State agencies, as applicable, in planning and providing for the recovery of Threatened and Endangered (T/E) species. Efforts include release of T/E species or experimental populations of T/E species within their historical ranges.

.07 File and Records Maintenance. Files are maintained in accordance with BLM Manual Section 1274 and disposed of according to the BLM Records Schedule. Guidance on the organization and contents of resource project files is contained in BLM Handbook H-1740-1 - Renewable Resource Improvement And Treatment Guidelines And Procedures.

.1 Planning Process.

.11 Resource Management Plan (RMP).

A. Decision making. A Land Use Plan (LUP) amendment shall be prepared for BLM proposed releases that change the goals and objectives of the existing LUP. In cases where proposed releases do not conflict with the existing goals and objectives of the LUP, then releases may be considered and described in site specific Activity Plans. During development of the Resource Management Plan (RMP), the BLM will coordinate with appropriate State and Federal agencies in establishing habitat, population, and desired plant community objectives for proposed release activities. Adequate inventory information should be available to analyze the proposed releases. The RMP decision should clearly identify State fish and wildlife agency population targets or objectives and anticipated distribution of species proposed for introductions, transplants, augmentations, or reestablishments. At a minimum, the RMP must indicate areas that are suitable for species introductions, transplants, augmentations, and reestablishments, and those areas which are unsuitable.

B. Participation. Opportunity for public participation is required. Parties and interests affected by BLM introductions, transplants, augmentations, or reestablishments must be given the opportunity to be involved in the public participation process. Affected parties may include adjacent State and Federal Agencies, Tribes, local municipalities, private landowners, and other interested groups or individuals.

.12 Activity Plan. A site-specific activity plan is required prior to the introduction, transplant, augmentation and reestablishment of plants or animals on public lands by the BLM unless specifically waived by the BLM State Director. Nearby landowners, State and Federal agencies, and other interested and affected parties should be encouraged to participate in the development and implementation of Activity Plans including Habitat Management Plans (HMP), Allotment Management Plans (AMP), Coordinated Activity Plans (CAP), Herd Management Area Plans (HMAP), Normal Fire Rehabilitation Plans (NFRP), and others. The activity plans must include:

- A. Site-specific and measurable vegetation/habitat population objectives which are based on existing ecological site potential/condition and habitat capability.
Planned actions to accomplish the stated objectives.
- B. Appropriate monitoring and evaluation.
- C. Coordination with other management plans and programs.

.13 National Environmental Policy Act (NEPA) Requirements. All proposed introductions, transplants, augmentations, and reestablishments, *authorized, funded or carried out by the BLM*, must be reviewed in accordance with the requirements of NEPA, to identify and

disclose environmental consequences and alternatives considered. Depending upon the specific facts and circumstances, this analysis may be documented through:

- 1) an Environmental Assessment (EA);
- 2) an Environmental Impact Statement (EIS);
- 3) an administrative determination that the action has been fully analyzed in a previous EA or EIS document; or,
- 4) a categorical exclusion determination.

Consult BLM Handbook H-1790-1- National Environmental Policy Act Handbook for requirements and standards for environmental documentation. The level of analysis, documentation, and public participation associated with the NEPA process will be commensurate with the potential biological, social, and economic impacts of the proposed action.

Instances where States are implementing introductions, augmentations, or reestablishments on BLM land, where there is negligible habitat disturbance and, where there is no federal nexus (i.e., BLM does not authorize, fund, or carry out the action), the action is not a Federal action for the purposes of NEPA. Despite the existence of constitutional power respecting fish and wildlife on Federally owned lands, Congress has reaffirmed the basic responsibility and authority of the States to manage fisheries and resident wildlife on Federal lands. Concomitantly, the BLM, as a Federal entity, has custody of the land itself and the habitat upon which fish and resident wildlife are dependent. Management of the habitat is a responsibility of the Federal Government. Therefore, it is incumbent upon the Federal and State partners to promote a cooperative agency management relationship in order to conserve and manage effectively the nation's fish and wildlife and the habitats upon which they depend.

.14 Required Documentation for Native Species Cultivars and Non-natives. The proposed introduction of native species cultivars and non-native species requires specific documentation to ensure compliance with EO 13112, and to provide an appropriate level of analysis to satisfy NEPA requirements. The proposed action must include the following documentation and provide an adequate level of analysis:

- A. A description of the proposed introduction, applicable statutes, regulations, existing management designations, activities and issues, and agency responsibilities.
- B. A description of the habitat and biological requirements of non-native species and the potential impacts (i.e., hybridization, limiting biological and genetic diversity, disease, and displacement) to native species.
- C. Analysis of potential impacts to biological and genetic diversity of both the naturalized species and potentially affected native species.
- D. Potential for hybridization, disease, and parasite transmission with/to native

species, feral or domestic animals and plants within the management area.

- E. Potential for displacement of native species in terms of forage, cover, water, competition, predation, allelopathy, reproductive interference, and other incompatibilities.
- F. A description of measures taken or mitigating circumstances that will help ensure the proposed introduction will not adversely affect any ecosystem. Identify agency responsibilities, procedures, and techniques, and associated costs in the event the species becomes a problem and has to be removed or otherwise controlled.
- G. Solicitation/documentation of comments from local, state, or national authorities responsible for the management of natural ecosystems and adjacent landowners that may be affected by the proposed activity.
- H. Supporting documents including, but not limited to, scientific papers, NEPA documents, project plans, and permit applications.

.15 Decision Record. The decision record must clearly outline the reasons for approval or denial of the proposed introduction, transplant, augmentation, or reestablishment, approved mitigating measures, and other special conditions.

.16 Approval. State Directors are responsible for approving animal and plant introductions, transplants, and reestablishments. Approval for supplementing or augmenting existing populations can be delegated to BLM District Managers.

.2 Coordination. Introductions, transplants, augmentations, and reestablishments require appropriate coordination between the BLM and cooperating agencies to assure success and alleviate potential conflicts. The intensity of coordination will be commensurate with the level of interest and involvement of all concerned parties. Effective coordination is essential during land use activity, prerelease planning, and the NEPA process. Coordination is required with affected landowners, land users, appropriate State and Federal agencies, health authorities, conservation and sporting groups, and others where necessary or appropriate.

.21 Notification Process. The BLM should encourage State agencies to cooperatively develop a two to five year release schedule, with the BLM so sufficient lead time is provided to complete planning and NEPA requirements, as appropriate.

.22 Prerelease Agreement/Operations Plan. Development of a new agreement/operations plan or the amendment of an existing plan with cooperators is encouraged for introduction, transplant, augmentation, or reestablishment of plants or animals. A prerelease

plan may cover one or more actions. The plan identifies roles and responsibilities of the cooperators. At a minimum, it should include responsibility for:

- 1) number and location(s) of individuals/populations to be released;
- 2) logistics and work force needs;
- 3) quarantine and health provisions;
- 4) funding;
- 5) monitoring and evaluation;
- 6) proposed control/mitigation of resource damage or depredation; and,
- 7) public affairs/notification responsibilities.

.23 Public Information. Public information should be prepared at the appropriate organizational level, commensurate with the level of public interest or controversy of the action. This information should identify agencies and publics to be informed, information methods, schedules, and responsibilities. Development of this information should be initiated in concert with the NEPA compliance process.

.3 Release of Federally-listed Threatened and Endangered Species. In accordance with the Endangered Species Act of 1973, as amended, the BLM will cooperate in efforts to recover federally-listed species and will provide opportunities to further the conservation of those species. In cooperation with the FWS and other appropriate Federal and State agencies, the BLM will utilize the planning process to identify historical habitat suitable for the release of T/E species onto public lands. Special exemptions to allow transplanting outside of a species' historical range may be provided for those T/E species for which remaining historical habitat has been destroyed or otherwise rendered unsuitable. The Secretary, through the FWS, will determine whether a federally-listed species will be released under the full protection of the ESA or as an experimental population. Title 50 C.F.R. Part 17 of the ESA establishes procedures for 1) the establishment and/or designation of certain populations of T/E species as experimental populations; 2) the determination of such populations as "essential" or "nonessential;" and, 3) the promulgation of appropriate protective measures for such populations. (See also BLM Manual Section 6840)

.31 Release of Experimental Populations. The release of federally-listed species designated as experimental populations shall be restricted to habitat documented as "historic range" and outside the current geographic range for the identified species. An "essential experimental population" is an experimental population whose loss would be likely to appreciably reduce the likelihood of the survival of the species in the wild. All other experimental populations are classified as "nonessential."

.32 Authorizing Experimental Populations. Before the BLM assists in the release of an experimental population of any T/E species or assists in the transportation to conduct a release, the FWS must find, by regulation, that such a release will further the conservation of the species. The BLM shall assist the FWS in providing the following data:

- 1) a means to identify an experimental population, including but not limited to its actual or proposed location, actual or proposed migration, number of specimens released, and other criteria appropriate to identify the experimental population;
- 2) any supporting data which would help in determining whether the experimental population is, or is not, essential to the continued existence of the species in the wild;
- 3) identification of management measures or other special protective actions which shall be implemented to ensure the success of the experimental population; and,
- 4) preparation of a monitoring plan which shall provide for periodic review and evaluation of the success or failure of the release and the effect the release may have on the conservation and recovery of the species.

.33 Management of Experimental Populations. For purposes of compliance with the ESA, each member of an experimental population shall be treated as a threatened species, except the nonessential experimental populations for purposes of the ESA, Section 7 (other than Section 7(a)(1)) shall be treated as a species proposed for listing.

Glossary of Terms

- A -

adverse impact: the displacing of, hybridization with, disease or parasite transmission to, or competition (social or biological) with or otherwise having negative impacts on the survival of a native species, including detrimental effects on its habitat or any component thereof.

augmentation: the act of releasing animals or plants with the intent of maintaining or enlarging an existing population of the same species within a specified area, sometimes referred to as supplemental transplants or restocking. Augmentation includes, but is not limited to, routine game fish stocking or plant reseedings.

- C -

control: eradicating, suppressing, reducing, or managing invasive species populations, preventing spread of invasive species from areas where they are present, and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and to prevent further invasions.

cultivar: a variation of a species, one that has been produced through breeding or deliberate selection through cultivation.

-D-

disturbance: events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused disturbances include actions such as timber harvest, livestock grazing, road construction and use, and the introduction of non-native species.

diversity: the absolute number of species in a community or species richness. A measure of the number of species and their relative abundance in a community; low diversity refers to a few species or unequal abundances, high diversity refers to many species or equal abundances.

-E-

ecological processes or ecosystem functions: the dynamic attributes of ecosystems, including interactions among organisms and interactions between organisms and their environment. Ecological processes are the basis for self-maintenance in an ecosystem. Ecosystem functions and processes, along with the reproduction and growth of organisms, are what cause an ecosystem to be self-renewing. A common goal for the restoration of any natural ecosystem is to recover self-renewing processes to the point where assistance is no longer needed.

ecosystem: the complex of a community of organisms and its environment.

endemic: restricted or peculiar to a locality or region.

exotic species: with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

experimental population: an introduced population, including any offspring arising solely therefrom, that has been so designated in accordance with the procedures of 50 C.F.R. Subpart H, but only when, and at such times as, the population is wholly separated geographically from non-experimental populations of the same species.

- F -

feral species: an exotic or domesticated species which has escaped or was released and has become wild.

-H-

habitat: the area or environment where an organism or ecological community normally lives or occurs, often characterized by dominant plant forms and/or physical.

- I -

indigenous: native

introduction: the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.

invasive species: a non-native species whose introduction does or is likely to cause economic or environmental harm or harm to human health, because of their potential to become a dominant or co-dominant species on the site if their future establishment and growth is not actively controlled by management.

-L-

land-use plan (LUP): A set of decisions that establishes management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. The term includes both resource management plans (RMPs) and management framework plan (MFPs).

- N -

~~native species: with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.~~

naturalized: non-native species in a region where it is able to reproduce successfully and live alongside native species in the wild.

NEPA process: all measures necessary for compliance with the requirements of Section 2 and Title I of the National Environmental Policy Act of 1969, as amended.

non-native: with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

- S -

species: a group of organisms ~~all of~~ which have a high degree of physical and genetic similarity, generally interbreed only among themselves, and show persistent differences from members of other organisms.

stakeholders: includes, but is not limited to, State, tribal and local government agencies, academic institutions, the scientific community, nongovernmental entities including environmental, agricultural, and conservation organizations, trade groups, commercial interests, and private landowners